

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Air Permit Review

Permit Issue Date:

Region: Raleigh Regional Office
County: Chatham
NC Facility ID: 1900009
Inspector's Name: Stanley Williams
Date of Last Inspection: 03/30/2016
Compliance Code: 3 / Compliance - inspection

Facility Data Applicant (Facility's Name): General Shale Brick, Inc. - Moncure Facility Facility Address: General Shale Brick, Inc. - Moncure Facility 300 Brick Plant Road Moncure, NC 27559 SIC: 3251 / Brick And Structural Clay Tile NAICS: 327121 / Brick and Structural Clay Tile Manufacturing Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			Permit Applicability (this application only) SIP: NSPS: Subpart OOO NESHAP: Subpart Brick-112j PSD: PSD Avoidance: NC Toxics: 15A NCAC 02D .1100 & 02Q .0711 112(r): Other:				
Contact Data			Application Data				
Facility Contact J. Warren Paschal Manager of Environmental Compliance (919) 774-6533 300 Brick Plant Road Moncure, NC 27559	Authorized Contact Kevin Ham VP Engineering & Research (423) 282-4661 3015 Bristol Highway Johnson City, TN 37601	Technical Contact J. Warren Paschal Manager of Environmental Compliance (919) 774-6533 300 Brick Plant Road Moncure, NC 27559	Application Number: 1900009.15A Date Received: 09/29/2015 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 04384/T38 Existing Permit Issue Date: 02/04/2015 Existing Permit Expiration Date: 06/30/2016				
Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2014	34.23	18.84	2.54	44.00	37.56	3.58	2.02 [Hydrogen chloride (hydrochlori)]
2013	47.52	26.16	2.92	61.09	52.08	4.96	2.80 [Hydrogen chloride (hydrochlori)]
2012	42.03	23.15	3.03	56.59	44.73	5.56	2.93 [Hydrogen chloride (hydrochlori)]
2011	47.77	26.32	5.72	76.05	44.63	11.67	5.89 [Hydrogen fluoride (hydrofluori)]
2010	72.80	39.14	8.18	107.22	73.85	17.04	8.66 [Hydrogen fluoride (hydrofluori)]
Review Engineer: David Hughes Review Engineer's Signature: Date:					Comments / Recommendations: Issue 04384/T39 Permit Issue Date: Permit Expiration Date:		

I. Purpose of Application

This permitting action is a renewal of an existing Title V permit pursuant to 02Q .0513. The existing Title V permit (04384T38) was issued on February 4, 2015. The renewal application was received on September 29, 2015 and deemed complete. Since the renewal application was received at least nine months prior to the expiration date, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

II. Facility Description

General Shale Brick owns and operates a brick manufacturing plant and a block plant located in Moncure, NC. The current operations consist of raw material processing, grinding and screening operations, coal processing system; wood fuel/sawdust system; a rotary coatings dryer equipped with a bagfilter, clay handling equipment, texturing operations; two wood/natural gas fired brick kilns with associated rotary dryer, two coal/natural gas/propane fired brick kilns with associated brick dryers, a concrete block manufacturing plant, a sand silo system, and a rumbler system.

III. History/Background/Application Chronology

May 6, 2003 – Initial Title V permit 04384T19 issued by Kevin Godwin.

January 13, 2004 – Administrative Amendment reissued initial TV because the facility never received a copy, permit 04384T20 by Kevin Godwin.

August 16, 2004 – Section 502(b)(10) modification and Administrative amendment to add screens and change the name of the facility. Permit number 04384T21 by Rahul Thaker.

February 28, 2005 – Significant modification 501(c)(2) modification of permit to add dry limestone adsorbers (DLA's) to Kilns number 3 and 4. Permit number 04384T22 by Jenny Sheppard.

June 27, 2005 – Section 502(b)(10) modification of permit to add conveyors and update insignificant activities list. Permit 04384T23 by Judy Lee.

May 16, 2006 – Significant modification 501(c)(2) to add new concrete block plant and update insignificant activities list. Permit 04384T24 by Jenny Sheppard.

January 10, 2007 – Minor modification to add sawdust handling system. Permit 04384T25 by Jenny Sheppard.

March 21, 2007 – Significant modification 501(c)(2) to add coal as a fuel to kilns number 3 and 4, add brick MACT language, and replace DLA on kiln 4 with DIFF. Permit 04384T26 by Jenny Sheppard.

November 6, 2007 – Administrative amendment to remove brick MACT language that has been vacated. Permit 04384T27 by Jenny Sheppard.

November 26, 2007 – Minor modification to add controls, texturizing operation, and sand silo system. Permit 04384T28 by Jenny Sheppard

November 12, 2008 – Significant modification to replace DIFF on kiln 4 with DLA. Permit 04384T29 by Jenny Sheppard.

June 16, 2009 – Minor modification to add bagfilter to texturization line. Permit 04384T30 by Jenny Sheppard.

February 4, 2010 – Minor modification to add rumbler system. Permit 04384T31 issued by Jenny Sheppard.

January 13, 2011 – Minor modification to add a texturizing operation to lines 3 and 4, permit 04384T32 issued by Kevin Godwin.

September 29, 2015 – Permit application 1900009.15A received as a Title V permit renewal application. The application was deemed complete for processing.

March 31, 2016 – RRO completed annual facility inspection.

September 14, 2016 – DRAFT permit sent to Permittee and RRO for comment prior to public notice and EPA review. No comments were received from Permittee or RRO.

XXXX XX, 2016 – DRAFT permit sent to 30-day public notice and 45-day EPA review. The 30-day public review period ended **XXXX XX, 2016** with the receipt of no comments. The 45-day EPA review period ended **XXXX XX, 2021** with the receipt of no comments.

IV. Permit Modification/Changes

The following table describes the modifications to the current permit as part of the renewal process.

Page Number	Section Number	Change
Attachment 2	Insignificant Activities	-removed one propane vaporizer per Permittee request
Cover	-	-amended all dates and permit revision numbers
All	Header	-amended permit revision number
5 & 18	Source Table & 2.1 D	-changed Bagfilter Control Device ID No. CD-CR7BF to CD-CR7BF1
7	2.1 A	-clarify emission source with associated control device(s)
8	2.1 A (Table)	-removed 15A NCAC 02Q .0705 (repealed) -added 15A NCAC 02Q .0711
9	2.1 A.2	-added POS and AOS heading where appropriate
14	2.1 B	-clarify emission source with associated control device(s)
15	2.1 B.1.c	-clarify emission source with associated control device(s)
	2.1 B.1.c.ii	-corrected rule cross reference
	2.1 B.1.e	-updated shell language
17	2.1 C.2.c	-updated shell language
18	2.1 D	-clarify emission source with associated control device(s) -changed Bagfilter Control Device ID No. CD-CR7BF to CD-CR7BF1
19	2.1 D.1.d.ii	-corrected rule cross reference
	2.1 E	-clarify emission source with associated control device(s)

Page Number	Section Number	Change
20	2.1 E (Table)	-added sources not subject to Subpart OOO
	2.1 E.1.c	-updated shell language
	2.1 E.2.c	-updated shell language
21	2.1 E.2.e.iv	-updated shell language
22	2.1 F.1.b	-updated shell language
24	2.1 G.1.d	-clarify emission source with associated control device(s)
	2.1 G.1.d.ii	-corrected rule cross reference
25	2.1 G.2.c	-updated sell language
	2.1 H	-clarify emission source with associated control device(s)
	2.1 H.1.a	-clarify emission source with associated control device(s)
	2.1 H.1.c	-clarify emission source with associated control device(s)
27	2.2 A (Table)	-removed 15A NCAC 02Q .0705 (repealed)
29	2.2 A.2.b	-updated shell language
30	2.2 A.4	-removed 15A NCAC 02Q .0705 (repealed)
30 to 39	General Conditions	-updated shell conditions (v4.0 12/17/15)
40	List of Acronyms	-updated to current list of acronyms

There were only minor, non-significant modifications to the equipment descriptions needed in the Title V Equipment Editor (TVEE).

V. Regulatory Review

The facility is subject to the following regulations:

15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes
15A NCAC 02D .0516, Sulfur Dioxide Emissions from Combustion Sources
15A NCAC 02D .0521, Control of Visible Emissions
15A NCAC 02D .0524, NSPS 40 CFR Part 60 Subpart OOO
15A NCAC 02D .1100, Control of Toxic Air Pollutants (*State-Enforceable Only*)
15A NCAC 02Q .0711, Control of Toxic Air Pollutants (*State-Enforceable Only*)
15A NCAC 02D .1806, Control of Odorous Emissions (*State-Enforceable Only*)
15A NCAC 02D .1109, CAA § 112(j); Case-by-Case MACT for Brick Manufacturers

No new or additional requirements have been added to this renewed permit.

VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS

New Source Performance Standards (NSPS) for “Nonmetallic Mineral Processing Plants,” 40 CFR Part 60, Subpart OOO does apply to sources at this facility. This permit renewal does not affect this status.

NESHAPS/MACT

The brick NESHAP (40 CFR Subpart JJJJJ) has been vacated. As such, no emission sources at the site are subject to Part 63 NESHAP. General Shale will evaluate compliance with the brick MACT

(Subpart JJJJ) upon promulgation of a final standards by US EPA.

Because the brick NESHAP (40 CFR Subpart JJJJ) was vacated and EPA failed to promulgate a new rule within 18 months, Clean Air Act (CAA) Section 112(j) allows State agencies to determine a “Case by Case” MACT for brick manufactures. General Shale is subject to the 2D .1109: CAA § 112(j); Case-by-Case MACT for Brick Manufacturers. General Shale will continue to comply with Subpart 112 (j) requirements as written into the current Title V Operating Permit.

The brick MACT (Subpart JJJJ) has been promulgated as of December 28, 2015. A compliance date for the MACT has been set for December 28, 2023. The requirements for the brick MACT should be included in the next permit renewal (2021).

PSD

General Shale has developed potential emission estimates for the existing point sources and has determined that the existing facility is a major stationary source under the PSD regulations when firing coal under the alternative operative scenario (AOS) for Kilns 3 and 4 (ES-K3K, ES-K4K). If burning natural gas or propane under the primary operating scenario (POS), the facility-wide potential emissions from the firing of natural gas are below the major source threshold for each pollutant. Therefore, because the Moncure facility can still operate under the AOS, the facility is considered a major source with regards to PSD regulations.

The minor source baseline dates for PM-10, sulfur dioxide, and nitrogen oxides have been triggered for Chatham County. There is no increase in actual emissions of these pollutants due to this renewal; therefore, emissions tracking for PSD increment purposes is not required.

Attainment Status

Chatham County has been classified as attainment for 8-hr ozone standard.

112r

This facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule.

CAM

The Compliance Assurance Monitoring (CAM) Rule (40 CFR Part 64) applies to pollutant-specific emissions units (PSEU) that are pre-control major sources and use a control device to comply with an emissions limit. 40 CFR 64 requires that a continuous compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. The before controls emissions from all controlled sources at the facility do not exceed their major sources thresholds. Thus, none of the sources at this facility are subject to CAM.

VII. Facility Wide Air Toxic Air Pollutants

This renewal does not trigger NC Air toxics under 02D .1100. 15A NCAC 02D .0705 was removed from the permit due to its repeal.

VIII. Facility Emissions Review

See Table above for a summary of the latest years actual emissions as reported to DAQ.

IX. Stipulation Review

The facility was last inspected by Stanley Williams of the RRO on **March 31, 2016**. Based on his observations, the facility appeared to be in compliance with the applicable air quality regulations. He did not indicate any necessary permit language modifications.

X. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 02Q .0521 above. There are no affected States/areas within 50 miles of this facility.

XI. Conclusions, Comments, and Recommendations

A professional engineer's seal was not required for this renewal.

A consistency determination was not required for this renewal.

RRO recommends issuance of the permit and was sent a DRAFT permit prior to issuance (See Section III of this document for a discussion).

RCO concurs with RRO's recommendation to issue the renewed air permit.